

Abstract of the Disclosure

In accordance with a policy to dynamically reallocate a computer resource to a plurality of virtual machine LPARs (Logical Partitions), optimum quantities of resource allocation are determined so that the virtual machine LPARs will hardly have resource shortages in the near future. A resource management server collects states of resource utilizations of the virtual machine LPARs and, then, forecasts next states of resource utilizations of the virtual machine LPARs on the basis of the collected states of resource utilizations. Subsequently, the resource management server computes coefficients of correlation among the virtual machine LPARs with respect to the resource utilizations of the virtual machine LPARs on the basis of execution histories of the virtual machine LPARs. Finally, the resource management server computes the optimum quantities of resource allocation on the basis of the forecasted states of resource utilizations and the computed coefficients of correlation, allocating the computer resource to the virtual machine LPARs in accordance with the computed optimum quantities of resource allocation.